

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1 to 88 (Cancelled).

89. (New) An end cap for a filter device comprising:

a channel providing fluid communication from an exterior of the end cap to an interior chamber of the end cap, a portion of the channel adjacent to the interior chamber defining a fluid flow path in a first direction; and

at least one member extending from and located within the interior chamber of the end cap defining, for a fluid exiting the channel and flowing into the interior chamber of the end cap, a fluid flow path in a second direction different from the first direction.

90. (New) The end cap of claim 89, wherein the filter device is a dialyzer.

91. (New) The end cap of claim 90, wherein the end cap is attachable to a casing of the dialyzer.

92. (New) The end cap of claim 89, wherein the channel is a blood inlet channel.

93. (New) The end cap of claim 90, wherein the first direction is a direction that is non-radial relative to a direction defined by a hollow fiber bundle positionable in an interior chamber of the dialyzer.

94. (New) The end cap of claim 93, wherein the first direction is a direction that is axial relative to the direction defined by a hollow fiber bundle positionable in an interior chamber of the dialyzer.

95. (New) The end cap of claim 90, wherein the second direction is a direction that is radial relative to a direction defined by a hollow fiber bundle positionable in an interior chamber of the dialyzer.

96. (New) The end cap of claim 89, wherein the at least one member is arranged circumferentially around the channel.

97. (New) The end cap of claim 89, wherein the at least one member extends towards a perimeter of the interior chamber of the end cap.

98. (New) The end cap of claim 89, wherein the at least one member is arranged such that the second direction of the fluid flow path defines an essentially radially symmetrical pattern.

99. (New) The end cap of claim 89, wherein the at least one member is integrally formed with the end cap.

100. (New) The end cap of claim 89, wherein the at least one member is curved.

101. (New) The end cap of claim 89, wherein the end cap includes at least two members, respective portions of the members being spaced equidistantly relative to each other.

102. (New) The end cap of claim 101, wherein the distance between respective portions of adjacent members decreases in the second direction of flow.

103. (New) A filter device comprising:
a casing for housing a filter element;
an end cap attachable to the casing, the end cap including a channel providing fluid communication from an exterior of the end cap to an interior chamber of the end cap, a portion of the channel adjacent to the interior chamber defining a fluid flow path in a first direction, and at least one member extending from and located within the interior chamber of the end cap defining, for a fluid exiting the

channel and flowing into the interior chamber of the end cap, a fluid flow path in a second direction different from the first direction.

104. (New) The filter device of claim 103, wherein the filter device is a dialyzer.

105. (New) The filter device of claim 103, wherein the channel is a blood inlet channel.

106. (New) The filter device of claim 104, wherein the filter element is a hollow fiber bundle.

107. (New) The filter device of claim 106, wherein the first direction is a direction that is non-radial relative to a direction defined by the hollow fiber bundle when the hollow fiber bundle is located in an interior chamber of the dialyzer.

108. (New) The filter device of claim 106, wherein the first direction is a direction that is axial relative to the direction defined by the hollow fiber bundle when the hollow fiber bundle is located in an interior chamber of the dialyzer.

109. (New) The filter device of claim 106, wherein the second direction is a direction that is radial relative to a direction defined by the hollow fiber bundle when the hollow fiber bundle is located in an interior chamber of the dialyzer.

110. (New) The filter device of claim 103, wherein the at least one member is arranged circumferentially around the channel.

111. (New) The filter device of claim 103, wherein the at least one member extends towards a perimeter of the interior chamber of the end cap.

112. (New) The filter device of claim 103, wherein the at least one member is arranged such that the second direction of the fluid flow path defines an essentially radially symmetrical pattern.

113. (New) The filter device of claim 103, wherein the at least one member is integrally formed with the end cap.

114. (New) The filter device of claim 103, wherein the at least one member is curved.

115. (New) The filter device of claim 103, wherein the end cap includes at least two members, respective portions of the members being spaced equidistantly relative to each other.

116. (New) The filter device of claim 115, wherein the distance between respective portions of adjacent members decreases in the second direction of flow.

117. (New) An end cap for a filter device comprising:
a channel providing fluid communication from an exterior of the end cap to an interior chamber of the end cap; and
at least one member extending from and located within the interior chamber of the end cap, the at least one member configured to impart a circular motion to fluid exiting the channel and flowing into the interior chamber of the end cap.

118. (New) The end cap of claim 117, wherein the filter device is a dialyzer.

119. (New) The end cap of claim 118, wherein the end cap is attachable to a casing of the dialyzer.

120. (New) The end cap of claim 117, wherein the channel is a blood inlet channel.

121. (New) The end cap of claim 117, wherein a portion of the channel adjacent to the interior chamber defines a fluid flow path in a first direction.

122. (New) The end cap of claim 118, wherein the first direction is a direction that is non-radial relative to a direction defined by a hollow fiber bundle positionable in an interior chamber of the dialyzer.

123. (New) The end cap of claim 118, wherein the first direction is a direction that is axial relative to a direction defined by a hollow fiber bundle positionable in an interior chamber of the dialyzer.

124. (New) The end cap of claim 117, wherein the at least one member is arranged circumferentially around the channel.

125. (New) The end cap of claim 117, wherein the at least one member extends towards a perimeter of the interior chamber of the end cap.

126. (New) The end cap of claim 117, wherein the at least one member is arranged such that the second direction of the fluid flow path defines an essentially radially symmetrical pattern.

127. (New) The end cap of claim 117, wherein the at least one member is integrally formed with the end cap.

128. (New) The end cap of claim 117, wherein the at least one member is curved.

129. (New) The end cap of claim 117, wherein the end cap includes at least two members, respective portions of the members being spaced equidistantly relative to each other.

130. (New) The end cap of claim 129, wherein the distance between respective portions of adjacent members decreases in the second direction of flow.

131. (New) A filter device comprising:
a casing for housing a filter element;
an end cap attachable to the casing, the end cap including a channel providing fluid communication from an exterior of the end cap to an interior chamber of the end cap, the channel defining a fluid flow path in a first direction, and at least one member extending from and located within the interior chamber of the end cap,

the at least one member configured to impart a circular motion to fluid exiting the channel and flowing into the interior chamber of the end cap.

132. (New) The filter device of claim 131, wherein the filter device is a dialyzer.

133. (New) The filter device of claim 131, wherein the channel is an inlet channel.

134. (New) The filter device of claim 131, wherein the filter element is a hollow fiber bundle.

135. (New) The filter device of claim 131, wherein a portion of the channel adjacent to the interior chamber defines a fluid flow path in a first direction.

136. (New) The filter device of claim 135, wherein the first direction is a direction that is non-radial relative to a direction defined by a hollow fiber bundle positionable in an interior chamber of the dialyzer.

137. (New) The filter device of claim 132, wherein the first direction is a direction that is axial relative to a direction defined by the hollow fiber bundle when the hollow fiber bundle is located in an interior chamber of the dialyzer.

138. (New) The filter device of claim 131, wherein the at least one member is arranged circumferentially around the channel.

139. (New) The filter device of claim 131, wherein the at least one member extends towards a perimeter of the interior chamber of the end cap.

140. (New) The filter device of claim 131, wherein the at least one member is integrally formed with the end cap.

141. (New) The filter device of claim 131, wherein the at least one member is curved.

142. (New) The filter device of claim 131, wherein the end cap includes at least two members, respective portions of the members being spaced equidistantly relative to each other.

143. (New) The filter device of claim 142, wherein the distance between respective portions of adjacent members decreases in the second direction of flow.

144. (New) A hemodialyzer device comprising:
a casing forming a housing, the casing having a blood outlet channel;
a hollow fiber bundle stored within the casing;
an end cap attachable to the casing, the end cap including a blood inlet channel providing fluid communication from an exterior of the end cap to an interior chamber of the end cap, the channel defining a fluid flow path in a first direction, and a plurality of curved members extending from and located within the interior chamber of the end cap, the at least one member defining, for a fluid exiting the channel and flowing into the interior chamber of the end cap, a fluid flow path in a second direction different from the first direction.

145. (New) The hemodialyzer device of claim 144, wherein a portion of the channel adjacent to the interior chamber defines a fluid flow path in a first direction.

146. (New) The hemodialyzer device of claim 145, wherein the first direction is a direction that is non-radial relative to the casing.

147. (New) The hemodialyzer device of claim 146, wherein the first direction is a direction that is axial relative to the casing.

148. (New) The hemodialyzer device of claim 144, wherein the second direction is a direction that is radial relative to the casing.

149. (New) The hemodialyzer device of claim 144, wherein the plurality of members are arranged circumferentially around the channel.

150. (New) The hemodialyzer device of claim 144, wherein the plurality of members extend towards a perimeter of the interior chamber of the end cap.

151. (New) The hemodialyzer device of claim 144, wherein the plurality of members are arranged such that the second direction of the fluid flow path defines an essentially radially symmetrical pattern.

152. (New) The hemodialyzer device of claim 144, wherein the plurality of members are integrally formed with the end cap.

153. (New) The hemodialyzer device of claim 144, wherein respective portions of each one of the plurality of members are spaced equidistantly relative to each other.

154. (New) The hemodialyzer device of claim 153, wherein the distance between respective portions of adjacent members decreases in the second direction of flow.

155. (New) A method for filtering a fluid, comprising the steps of:
passing the fluid through a filter device, the filter device including a casing for housing a filter element and an end cap attachable to the casing, the end cap including a channel providing fluid communication from an exterior of the end cap to an interior chamber of the end cap, a portion of the channel adjacent to the interior chamber defining a fluid flow path in a first direction, and at least one member extending from and located within the interior chamber of the end cap defining, for a fluid exiting the channel and flowing into the interior chamber of the end cap, a fluid flow path in a second direction different from the first direction.

156. (New) The method of claim 155, wherein the step of passing the fluid through the filter device involves passing blood through the filter device.

157. (New) The method of claim 156, wherein the step of passing blood through the filter device involves passing blood through a dialyzer.

158. (New) A method for filtering a fluid, comprising the steps of:
passing the fluid through a filter device, the filter device including a casing for housing a filter element and an end cap attachable to the casing, the end cap including a channel providing fluid communication from an exterior of the end cap to an interior chamber of the end cap, and at least one member within the interior chamber of the end cap, the at least one member configured to impart a circular motion to fluid exiting the channel and flowing into the interior chamber of the end cap.

159. (New) The method of claim 158, wherein the step of passing the fluid through the filter device involves passing blood through the filter device.

160. (New) The method of claim 159, wherein the step of passing blood through the filter device involves passing blood through a dialyzer.